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DIVISION OF PROPERTY TAXATION

JoAnn Groff
Property Tax Administrator

TO: All County Assessors

FROM: JoAnn Groff
Property Tax Administrator

SUBJECT: 2008 Personal Property Factors and Tables

DATE: December 26, 2007

MEMORANDUM

The attached factors and tables are to be used for the valuation of personal property for the 2008 assessment year.

On December 20, 2007, the Statutory Advisory Committee (SAC) to the Property Tax Administrator recommended the attached Chapter 4 for approval and use for 2008. The State Board of Equalization (SBOE) has thirty days to review SAC recommendations. If the SBOE's review results in changes, you will be so advised in a separate memorandum.

If you have any questions, please contact the Division at (303) 866-2371.

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PERSONAL PROPERTY TABLES

The personal property tables chapter contains the replacement cost factors, economic life estimates, and percent good tables that are provided to assist county assessors in valuing personal property by the cost approach. The level of value adjustment factors are provided according to § 39-1-104(12.3)(a)(I), C.R.S., and must be used to factor assessment date actual values of personal property to the level of value (as of the appraisal date) in effect for real property.

The tables and factors published here are subject to verification in the marketplace at the retail “end user” trade level. All cost approach value estimates are based upon the factors and tables found in this chapter. Cost approach value estimates must be reconciled to the market and income approaches to value based upon the appraiser's opinion as to the reliability of the information used to derive the value estimates from each approach. Reconciliation of the applicable approaches to value is required for the valuation of all personal property in Colorado.

Actual Value Determined When.

(13)(a) ...the cost approach shall establish the maximum value of property if all costs incurred in the acquisition and installation of such property are fully and completely disclosed by the property owner to the assessing officer.

(c) ...However, nothing in this subsection (13) shall preclude the assessing officers from considering the market approach or income approach to the appraisal of personal property when such considerations would result in a lower value of the property and when such valuation is based on independent information obtained by the assessing officers.

§ 39-1-103(13), C.R.S.

For Colorado personal property assessment purposes, the actual value is the value in use, as installed. Colorado statutes require that personal property be valued inclusive of all costs incurred in acquisition and installation of the property. The costs of acquisition, installation, sales/use tax, and freight to the point of use must be considered in the personal property valuation. The inclusion of these costs requires that personal property be valued in use. Therefore, the actual value of personal property is based on its value in use.

Counties that develop in-house trending or depreciation tables must submit them annually for approval to the Statutory Advisory Committee to the Property Tax Administrator prior to use.

COST FACTOR TABLES

The replacement cost factor tables are provided to assist the assessor in the determination of replacement cost new estimates by multiplying original or historical cost of personal property by the cost price indexes published and made available courtesy of Marshall Valuation Service. When the original cost is multiplied by the factor for the year of acquisition, the product will approximate the current cost to replace, or the Replacement Cost New (RCN), of the personal property being appraised with property having similar utility.

The assessor must select the appropriate industry category number that corresponds to the type of personal property being appraised. Thirteen industry category numbers are supplied. In many instances, the individual industry category covers more than one type of commercial or industrial property. Specific types of commercial and industrial property are found in each industry category.

If the property to be factored can be specifically identified, the appropriate specific industry category (such as 3 for office personal property) should be applied. If the property cannot specifically be identified, the industry category for the business type may be used. If property is generally useful in many types of business activities, the predominant use shall determine the industry category.

If particular property types are not included in the table, a comparable property type industry category number may be selected. The “average of all” (industry category number 1) should be selected if the specific property type is not included in any of the industry categories and a similar industry category is not evident.

After selecting the appropriate industry category number, the assessor uses the specific cost factor that corresponds to the year of acquisition of the personal property. The original cost of the personal property is then multiplied by the cost factor to arrive at the estimated replacement cost new (RCN) as of the assessment date.

Example:

Personal Property	Industry Number	Acquisition Year	Cost	Cost Factor	RCN
Desk	3	2002	\$1,500	1.20	\$1,800

In other words, it would cost \$1,800 on the current assessment date to replace an office desk purchased in 2002 for \$1,500.

INDUSTRY CATEGORY NUMBERS

Types of Personal Property Included in Industry Categories

Industry Category Table	
<i>Industry Category Number</i>	<i>Property Type</i>
1	Average of All
2	Candy and Confectionery, Creamery and Dairy, Flour, Cereal and Feed, Garage, Meat Packing, Paint, Refrigeration and Rubber
3	Office Personal Property (excluding copiers and other technologically advanced personal property)
4	Retail and Wholesale Stores, Warehousing
5	Rental Furnishings, Apartments, Hotels and Motels
6	Banks, Savings and Loans, Restaurants and Lounges, and Theaters
7	Contractors' Personal Property
8	Laundry & Cleaning Personal Property
9	Industrial Bakery, Bottling, Canneries, and Fruit Packing
10	Brewing and Distilling, Cement, Clay Products, Glass, Metal, Logging, Metal Working, Mining and Milling
11	Manufacturing of Chemical, Electrical, Paper, Motion Pictures and Television, Printing, and Woodworking Personal Property
12	All Petroleum, Ethanol, Bio-diesel, and Textile
13*	Computer and PC, Computer-integrated Personal Property, Telephone and Telecommunication Personal Property, and Copiers

Source: Marshall Valuation Service, October 2007

*Please refer to **Chapter 7, Special Issues**, under *Technologically Advanced Personal Property*, for more information.

2008 REPLACEMENT COST NEW FACTORS

2008 PERSONAL PROPERTY COST FACTOR TABLE

		Industry Category Number					
		1	2	3	4	5	6
Year Acquired	1982	1.88	1.82	1.73	1.86	1.83	1.78
	1983	1.84	1.79	1.69	1.81	1.79	1.74
	1984	1.79	1.74	1.64	1.75	1.74	1.68
	1985	1.77	1.71	1.62	1.73	1.71	1.66
	1986	1.75	1.70	1.60	1.71	1.69	1.65
	1987	1.73	1.68	1.58	1.68	1.66	1.62
	1988	1.66	1.61	1.51	1.61	1.60	1.56
	1989	1.57	1.53	1.44	1.53	1.52	1.48
	1990	1.53	1.49	1.41	1.49	1.47	1.45
	1991	1.50	1.46	1.39	1.47	1.44	1.43
	1992	1.48	1.44	1.38	1.44	1.42	1.41
	1993	1.45	1.42	1.36	1.41	1.38	1.38
	1994	1.41	1.38	1.32	1.36	1.34	1.33
	1995	1.37	1.33	1.29	1.32	1.29	1.30
	1996	1.34	1.31	1.26	1.30	1.28	1.28
	1997	1.32	1.30	1.25	1.28	1.26	1.26
	1998	1.31	1.29	1.24	1.27	1.25	1.26
	1999	1.31	1.28	1.24	1.27	1.24	1.25
	2000	1.28	1.26	1.22	1.24	1.22	1.23
	2001	1.27	1.25	1.21	1.24	1.21	1.22
	2002	1.27	1.24	1.20	1.23	1.20	1.22
	2003	1.25	1.23	1.19	1.21	1.18	1.20
	2004	1.20	1.19	1.16	1.17	1.15	1.16
	2005	1.12	1.11	1.10	1.10	1.09	1.09
	2006	1.07	1.06	1.05	1.05	1.05	1.05
	2007	1.00	1.00	1.00	1.00	1.00	1.00

Source: Marshall Valuation Service, October 2007

2008 REPLACEMENT COST NEW FACTORS CONTINUED

2008 PERSONAL PROPERTY COST FACTOR TABLE

		Industry Category Number						
		7	8	9	10	11	12	13
Year Acquired	1982	1.81	1.88	1.90	1.85	1.88	1.86	1.00
	1983	1.77	1.85	1.88	1.82	1.85	1.85	1.00
	1984	1.74	1.79	1.83	1.78	1.80	1.81	1.00
	1985	1.72	1.77	1.81	1.75	1.78	1.79	1.00
	1986	1.70	1.75	1.79	1.74	1.77	1.79	1.00
	1987	1.68	1.73	1.77	1.72	1.75	1.79	1.00
	1988	1.63	1.66	1.69	1.66	1.65	1.71	1.00
	1989	1.55	1.57	1.60	1.58	1.57	1.63	1.00
	1990	1.50	1.53	1.56	1.54	1.54	1.59	1.00
	1991	1.47	1.50	1.53	1.51	1.52	1.55	1.00
	1992	1.44	1.49	1.51	1.50	1.52	1.54	1.00
	1993	1.40	1.46	1.49	1.48	1.50	1.52	1.00
	1994	1.37	1.42	1.45	1.45	1.46	1.49	1.00
	1995	1.33	1.37	1.39	1.40	1.40	1.44	1.00
	1996	1.31	1.35	1.37	1.37	1.38	1.41	1.00
	1997	1.28	1.33	1.35	1.35	1.37	1.39	1.00
	1998	1.27	1.32	1.34	1.34	1.36	1.37	1.00
	1999	1.26	1.32	1.34	1.33	1.37	1.36	1.00
	2000	1.24	1.29	1.32	1.31	1.34	1.34	1.00
	2001	1.23	1.28	1.30	1.30	1.33	1.33	1.00
	2002	1.22	1.27	1.30	1.29	1.34	1.31	1.00
	2003	1.20	1.25	1.27	1.27	1.31	1.29	1.00
	2004	1.17	1.21	1.23	1.22	1.26	1.24	1.00
	2005	1.09	1.12	1.13	1.12	1.16	1.15	1.00
	2006	1.05	1.07	1.08	1.07	1.09	1.08	1.00
	2007	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Marshall Valuation Service, October 2007

2008 COST INDEX - FIXTURES/LEASEHOLD IMPROVEMENTS

June 30, 2006 Level of Value

This cost index is provided to assist the assessor in relating original or historical costs of fixtures or leasehold improvements to the real property level of value. The property may be valued using real property appraisal records for computations and should be assessed to the owner of record.

When using this method of valuation, the property must be classified and abstracted as real property improvements. The factors are useful only in the cost approach when attempting to factor historical costs to the correct level of value. All cost approach value estimates must be reconciled to the sales comparison (market) and income approaches to value as with other real property improvements. The factors found in this table are for estimating replacement costs only and do not include an allowance for depreciation.

**2008 FIXTURES/LEASEHOLD IMPROVEMENTS
COST FACTOR TABLE**

Year Acquired	Factor
1982	2.03
1983	1.96
1984	1.88
1985	1.83
1986	1.82
1987	1.81
1988	1.77
1989	1.74
1990	1.69
1991	1.67
1992	1.64
1993	1.57
1994	1.51
1995	1.47
1996	1.46
1997	1.41
1998	1.39
1999	1.35
2000	1.28
2001	1.27
2002	1.24
2003	1.21
2004	1.13
2005	1.06
2006	1.00
2007	0.95

Source: Marshall Valuation Service, October 2007

AVERAGE ECONOMIC LIFE ESTIMATES

The average economic life estimates are provided for assistance in applying the percent good depreciation tables for each type of property being valued. The economic life recommendations are based upon the Class Life Asset Depreciation Range published by the Internal Revenue Service, Marshall Valuation Service, and other sources. Additional information about the economic life estimates may be found in I.R.S. publication 946, "How to Depreciate Property", available from the I.R.S.

The economic life estimates are based on average national service lives and assume normal use and maintenance of the property. Typical physical depreciation and functional/technological obsolescence for the personal property are accounted for when using the appropriate economic life estimate. Use of economic lives that differ from those in the estimates must be documented. Counties and taxpayers are encouraged to provide this documentation for review by the Division of Property Taxation for possible update of existing published lives.

For specific types of personal property, economic life estimates were developed based on studies completed by the Division of Property Taxation.

PROPERTY TYPE	Recommended Economic Life (years)
COMMERCIAL	
Wholesale / retail personal property	9
Adding machines, calculators	6
All terrain vehicles (ATVs): (for add'l information, see Chapter 7)	6
Amusement parks	12
<i>Automated teller machines (ATMs):</i> (see Chapter 7)	
Computer / electronic components / portion	4*
Structural housing	10
Auto repair shops	10
Bank vault doors	20
Barber and beauty shops	10
<i>Cable television:</i>	
Digital TV set-top boxes	4*
Subscriber converters, other than digital	5
Test personal property	8
Origination personal property	9
Satellite receiving ground stations	9
Distribution & subscriber connection property	10
Headend personal property	11
Microwave systems	9
Computers – personal & accessories	3*
Computers – other and stand alone peripherals	4*
Computer – integrated personal property	4
Construction personal property, general	6
Copiers	4*
Data handling personal property, except computers	6
Electronic personal property, except computers or gaming	6
<i>Gaming:</i> see Chapter 7	
Electronic (e.g., slot machines)	5
Larger gaming personal property (e.g., tables)	10
<i>Gas station personal property:</i>	
Electronic fuel pumps	6
General	10
Tanks (e.g., above ground, propane, septic)	10
Tanks (e.g., below ground, double-walled, fuel)	20
Hydroelectric Generators	20
Golf carts	6
Laundry and dry cleaning	10
Machinery (not otherwise listed)	10
<i>Medical personal property:</i> (for additional info., see Chapter 7)	3 to 10
<i>Commercial Continued on next page</i>	

* Use appropriate technologically advanced computer percent good table 2008.

Sources: Division of Property Taxation, Marshall Valuation Service, & I.R.S.

PROPERTY TYPE	Recommended Economic Life (years)
COMMERCIAL (continued)	
Meter and stamp personal property	6
Office furniture	10
Pedicabs	10
Photo processing personal property (electronic)	6
Port-a-potty	10
Radio and television broadcasting	6
Recreation and amusement	10
Restaurant and bar (all)	10
River Rafts	10
Shopping carts	5
Signs (billboard and monument)	20
Signs (other)	10
Signs (electronic)	6
<i>Snow cats:</i> (for additional information see Chapter 7)	
Heavy use (e.g., snowgrooming operations)	6
Moderate use (e.g., transportation operations)	10
<i>Storage tanks:</i>	
Tanks (e.g., above ground, propane, septic)	10
Tanks (e.g., below ground, double-walled, fuel)	20
Telecommunication personal property (excluding towers)	4*
Theater	10
Towers	20
Typewriters	6
Vending machines	10
Video machines (arcade)	6
RESIDENTIAL/COMMERCIAL	
Residential rental furnishings	10
Apartment, hotel and motel furnishings	10
NATURAL RESOURCES	
<i>Mining - Metallic and Nonmetallic</i>	
Mining, quarrying, & milling personal property	10
<i>Petroleum and Natural Gas</i>	
Exploration, drilling	6
High-technology drilling rigs	10
Production (excluding pipelines)	14
Marketing, retail	9
Machinery (not otherwise listed)	10
Refining	16
<i>Timber</i>	
Logging	6
Sawmills, permanent	10
Sawmills, portable	6

Use appropriate technologically advanced computer percent good table 2008.

Sources: Division of Property Taxation, Marshall Valuation Service, & I.R.S.

PROPERTY TYPE	Recommended Economic Life (years)
INDUSTRIAL	
Aerospace	10
Apparel and fabricated textiles	9
Bakeries and Confectionery	12
Brewery	12
Canneries and frozen food	12
Cement manufacture	20
Cereal, flour, grain and mill products	17
Chemicals and related products	10
Clay and gypsum products	15
Concrete manufacture	15
Dairy products manufacturing	12
Electrical personal property manufacturing	10
Electronic personal property manufacturing	6
Fabricated metal products	12
Food and beverage production	12
Special handling devices	4
Forklifts	10
Glass and glass product	14
Grain Bins	20
Jewelry	12
Lumber, wood products and furniture	10
Machinery (not otherwise listed)	10
Meat packing	12
Motion picture and television production	12
Paint and varnish	10
Plastics and plastic products	11
Printing and publishing	11
Professional and scientific instruments	10
Paperboard and pulp	10
Rubber products	14
Refining personal property	16
<i>Semi-conductor manufacturing:</i>	
General	5
Research and development	3
Test personal property	5
Wafer fabrication	3
Soft drink bottling	12
Special tools (all industries)	3
Steel and related products	15
Stone products	15
Sugar and sugar products	18

Sources: Division of Property Taxation, Marshall Valuation Service, & I.R.S.

PERCENT GOOD TABLE

The personal property percent good table is provided to assist the assessor in estimating the replacement cost new less normal depreciation (RCNLD). The column headings represent the average service life expectancy of the personal property being appraised. Each column contains the percent good factor for a specified age in the life of the property.

Percent good tables measure the value remaining in personal property. Depreciation tables measure the loss in value at a specified age. The factor shown in the columns of the percent good table represents the percentage of RCN remaining at a specified age. The general percent good tables are built upon the following assumptions:

1. Iowa State University property retirement & depreciation studies
2. A specified rate of return
3. Average condition and usage of typical property

The general percent good table is generic in nature. It was designed to be generally useful for the majority of personal property. It is not specific to any particular industry or type of personal property.

The table was designed to account for normal physical depreciation. Typical physical depreciation and functional/technological obsolescence are accounted for when the appropriate economic life estimate is used. Additional functional/technological and/or economic obsolescence may also exist. If documented to exist, additional functional and economic obsolescence must be measured in the marketplace either using the market approach or rent loss methods. In addition, any adjustments to the percent good due to the condition of the subject property must be defensible and documented.

The minimum percent good shown for each of the columns is useful as a guide to residual value. It is not absolute and must be reconciled with value in use information at the retail "end user" trade level for similar types of property. If the market information shows that the actual value of personal property is lower than the value developed by using the minimum percent good, the use of the minimum percent good should be rejected in favor of the lower value. The actual value of the personal property must be determined as long as the personal property is taxable.

If the cost-calculated value is lower than the market and/or income approach developed value in use when the personal property reaches its minimum percent good, the assessor should review the original cost, all assigned factors, the physical condition of the property, and other pertinent contributors to value. If these are correct, the assessor must use the cost approach value as the actual value of the personal property according to § 39-1-103(13)(a), C.R.S.

To use the table, the assessor must determine the economic life and the effective age of the subject property. The percent good may be determined by moving across the columns until the one specified for the economic life is reached and then down this column to the point that reflects the effective age of the property.

Example:

Personal Property	Economic Life	Age	RCN	Percent Good	RCNLD
Desk	10 years	6 years	\$1,800	56%	\$1,008

The assessor must also consider functional and economic obsolescence, atypical physical condition, or other factors that might affect the value of the personal property. The assessor should also consider the frequency and extent of maintenance to the property. Extensive maintenance or reconditioning of the property may extend the economic life of the property just as a lack of maintenance may shorten the economic life.

DEPRECIATED VALUE FLOOR

In the year in which the personal property has reached its minimum residual percent good floor, the applicable Replacement Cost New (RCN) trending factor in use at that time is "frozen" and the Level of Value (LOV) adjustment factor is "frozen" at 1.0. For the assessment years that follow, the RCNLD value does not change unless the personal property has been reconditioned or upgraded to extend its remaining economic life.

It is possible that the market or income approach may indicate a lower value than the personal property's minimum percent good. In addition, as property ages, the use of original installed cost multiplied by trending factors may not yield reasonable RCN values. Any RCNLD estimate should be crosschecked with sales comparison (market) and income information sources, if possible, and the appropriate value used.

VALUATION OF USED PERSONAL PROPERTY

The valuation of used personal property requires that a decision be made concerning the remaining economic life of the property. If the personal property's elapsed age from its actual year of manufacture, or estimated effective year of manufacture, is equal to or greater than the number of years in which the personal property would have reached its fully depreciated value floor, then the price paid for the personal property is to be treated as RCNLD and "frozen" at that value. RCN trending and percent good factors will not be applied to the frozen value. The LOV adjustment factor is "frozen" at 1.0 and will remain 1.0 unless the personal property is reconditioned or upgraded.

When the personal property is reconditioned to extend its remaining economic life and/or upgraded to improve its utility, the reconditioned/upgraded personal property may be treated similar to newer personal property and the acquisition cost subject to depreciation over a complete economic life of the personal property. In such cases, the county staff must contact the taxpayer and discuss the effect that the reconditioning/upgrade has had on the personal property so that a reasonable effective age for the personal property may be established.

Even though personal property has been permanently taken out of service, but has not been scrapped or sold, it still has value. However, additional functional and/or economic obsolescence may exist.

If the elapsed age from the year of manufacture, or estimated effective year of manufacture, is less than the number of years when the personal property would have reached its depreciated value floor, as evidenced in its recommended economic life from the preceding tables, then the property is treated similar to new personal property and the owner's acquisition cost is

subject to depreciation over the personal property's complete economic life. However, the resulting value should be compared to the sales comparison (market) value for the personal property, if possible.

2008 GENERAL PERCENT GOOD TABLE

		AVERAGE ECONOMIC LIFE IN YEARS																	
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
EFFECTIVE AGE	1	69	78	83	87	89	91	93	94	95	95	96	97	97	97	98	98	98	98
	2	40	55	66	73	78	82	85	87	89	90	92	93	94	94	95	96	96	97
	3	18	35	48	58	66	72	76	80	83	85	87	89	90	91	92	93	94	95
	4	15	19	33	44	54	61	67	72	76	79	82	84	86	88	89	91	92	92
	5		15	20	32	42	51	58	64	69	73	77	80	82	84	86	88	89	90
	6			15	21	31	41	49	56	62	67	71	75	78	80	83	85	86	88
	7				15	22	33	41	48	55	61	65	69	73	76	79	81	83	85
	8					15	24	32	40	48	53	59	64	68	72	75	78	80	82
	9						15	25	33	39	47	53	58	63	67	71	74	77	79
	10							15	26	33	41	46	52	57	63	66	70	74	76
	11								15	27	33	41	47	53	58	61	66	70	73
	12									22	28	34	41	47	52	56	61	66	69
	13									15	25	29	37	41	47	51	57	62	66
	14										15	26	31	38	44	47	54	58	62
	15											20	25	32	38	44	49	54	58
	16											15	23	26	33	39	44	49	54
	17												15	25	28	34	40	45	50
	18													15	27	30	35	41	46
	19														23	25	31	37	42
	20														15	21	27	33	38
	21															20	23	29	34
	22															15	19	25	31
	23																15	22	28
	24																	15	25
	25																		22
	26																		15

Source: Division of Property Taxation

Using market studies, the following table has been developed for **Personal Computers (PCs) and Accessories:**

Percent Good Table 2008

THREE-YEAR ECONOMIC LIFE TABLE		
Effective Age		Percent Good
	1	44%
	2	23%
	3	13%
	4	7%

Source: Division of Property Taxation

Using market studies, the following table has been developed for **Other Computers and Stand Alone Peripherals:**

Percent Good Table 2008

FOUR-YEAR ECONOMIC LIFE TABLE		
Effective Age		Percent Good
	1	50%
	2	36%
	3	22%
	4	13%
	5	7%

Source: Division of Property Taxation

The “Other Computers and Stand Alone Peripherals” percent good table should also be used for Copiers and Telecommunication Personal Property. For personal property classified as Computer-integrated Personal Property, a four (4) year economic life is assigned. The four (4) year life depreciation table found in the General Percent Good Table in this chapter should be used.

If you have questions concerning personal computers (PCs) and accessories, other computers and stand alone peripherals, computer-integrated personal property, copiers, or telecommunication personal property, please refer to **Chapter 7, Special Issues**, under Technologically Advanced Personal Property.

LEVEL OF VALUE FACTORS

The following table contains the indexes for adjusting current actual value of personal property to the level of value (LOV) in effect for real property as specified by § 39-1-104(12.3)(a)(I), C.R.S. The procedure involves the multiplication of the assessment date actual value (RCNLD) estimate by the appropriate LOV factor for the type of property being valued. When personal property reaches its fully depreciated value floor the actual value should be determined and frozen. The LOV factor is “frozen” at 1.0 and will remain 1.0 unless the personal property is reconditioned or upgraded.

Example:

Personal Property	Industry Number	Age	RCNLD	LOV Factor	Actual Value
Desk	3	6 years	\$1,008	0.95	\$958

2008 PERSONAL PROPERTY LOV FACTOR TABLE
June 30, 2006 Level of Value

Industry Category Number	LOV Factor
1	0.94
2	0.95
3	0.95
4	0.95
5	0.96
6	0.95
7	0.96
8	0.94
9	0.93
10	0.94
11	0.92
12	0.93
13	1.00

Source: Division of Property Taxation and Marshall Valuation Service